

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 70.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003993**Date Inspected:** 24-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Japan Steel Works**Location:** Muroran, Japan**CWI Name:** Makhmud Ashadi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower, Deviation and Jacking Saddles**Summary of Items Observed:**

On this date OSM Quality Assurance (QA) Representative Daniel L. Reyes was present during the welding of the procedure qualification record test plate relative to this project. The following was observed:

Fabrication Shop # 4

The QA inspector to observe the scheduled welding of the Procedure Qualification Record (PQR) Test Plate identified as SW-11-1. The test plate appeared to comply with AWS D1.5-2002, Figure 5.1 and the plate dimensions were verified by the QA inspector prior to welding which appeared as follows, 910mm long x 460mm wide x 110mm thick. The included angle of the single-V-groove joint measured approximately 20 with the root opening measured at 20mm. The welding of the PQR test plate was performed by Japan Steel Works, Ltd. (JSW) personnel Kubota Mamoru ID 74-3666 utilizing the Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specification (WPS) SJ-2942 WP-16.

The QA inspector verified the Alternating Current (AC) welding parameters which appeared as follows, 260 amps and 24.5 volts with a travel speed of 154mm/m. The preheat and interpass temperatures were also verified by the QA inspector and were noted as follows, 190 to 205 Celsius. The verification task was performed by the QA inspector utilizing a Fluke 337 Clamp Meter and Tempilstik Heat Indicator Crayons.

The consumable utilized by the welding personnel appeared to be a Hobart Brothers Product and the trade name was identified as Hoballoy9018-M which appeared to comply with the AWS Specification A5.5 and the AWS Classification E9018-M H4R. The size of the electrode was 4.8 mm in diameter.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The Quality Control (QC) inspection was performed by Intertek Testing Services (ITS) personnel Makhmud Ashadi who performed the verification the preheat temperatures, welding parameters and the in process weld inspection during this shift utilizing the WPS. The welding parameters were verified utilizing a Hioki 3109 Clamp Meter, Model RMS and the surfaces temperatures were verified utilizing an Anritsu HA 100E digital surface thermometer during the QC verification.

The following digital photographs illustrate the observations of the activities performed on this date.



Summary of Conversations:

There were no conversations relative to the project on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes, Danny
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Quality Assurance Inspector

Reviewed By:	Lanz, Joe
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QA Reviewer
